

SEQUENCE LISTINGS

<110> Hanmi Pharm. Co., Ltd.

<120> EXPRESSION VECTOR FOR SECRETING ANTIBODY FRAGMENT USING E. COLI
SIGNAL SEQUENCE AND METHOD FOR MASS-PRODUCING ANTIBODY FRAGMENT

<130> Q94300

<140> 10/576,068

<141> 2006-04-14

<150> KR10-2003-0072216

<151> 2003-10-16

<150> PCT/KR04/02625

<151> 2004-10-14

<160> 35

<170> KopatentIn 1.71

<210> 1

<211> 75

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 1

gggaagcttc gatcgacat ccagatgacc cagtctccat cctccctgtc tgcactctgta 60

ggggacagag tcacc 75

<210> 2

<211> 80

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 2

tggtttttgc tgataccagg ctaagtaatt tctgatgcc tgacttgccc gacaagtgat 60

ggtgactctg tcccctacag 80

<210> 3

<211> 80

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 3
 cctggtatca gcaaaaacca gggaaagccc ctaagctect gatctatgct gcatccactt 60
 tgcaatcagg ggtcccatct 80

<210> 4
 <211> 80
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 4
 aggcgtgtagg ctgctgatgg tgagagtga atctgtccca gatccactgc cactgaaccg 60
 agatgggacc cctgattgca 80

<210> 5
 <211> 80
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 5
 ccacacagcag cctacagcct gaagatgttg caacttatta ctgtcaaagg tataaccgtg 60
 caccgtatac ttttggccag 80

<210> 6
 <211> 41
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 6
 tttgatttcc accttggtcc cctggccaaa agtatacggt g 41

<210> 7
 <211> 75
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic construct

<400> 7

gggaagcttc gatcgaggt gcagctggtg gactctgggg gaggtcttgg acagcccggc	60
aggtcctctga gactc	75
<210> 8	
<211> 79	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic construct	
<400> 8	
agcttgccgg acccagtgc tggcataatc atcaaagggt aatccagagg ccgcacagga	60
gagtctcagg gacctgccg	79
<210> 9	
<211> 80	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic construct	
<400> 9	
tgcactgggt ccggcaagct ccagggaagg gcctggaatg ggtctcagct atcacttga	60
atagtggta catagactat	80
<210> 10	
<211> 80	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic construct	
<400> 10	
atacagggag ttcttggcgt tgtctctgga gatgggtaat cggccctcca cagagtcgc	60
atagtctatg tgaccactat	80
<210> 11	
<211> 80	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic construct	
<400> 11	

acgccaaagaa ctcctctgtat ctgcaaatga acagtctgag agctgaggat acggccgtat 60
attactgtgc gaaagtctcg 80

<210> 12
<211> 84
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 12
cactcgagac ggtgaccagg gtaccttggc cccaatagtc aaggaggagac gcggtgctaa 60
ggtacgagac ttctgcacag taat 84

<210> 13
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 13
cccaagctta ggcctccacc aagggcccat cggtcttcc 39

<210> 14
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 14
gggggatcct tatgggcacg gtgggcatgt gtgagttttg tcacaaga 48

<210> 15
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 15
cccaagcttt cgcgaactgt ggctgcacca tctgtcttca tc 42

<210> 16

<211> 42
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 16
 cccggatccc taacactctc ccctgttgaa gctctttgtg ac 42

 <210> 17
 <211> 69
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 17
 atgaaaaaga caatcgcatc tcttcttgca tctatgttcg tttttctat tgctacaaat 60
 gccaggcg 69

 <210> 18
 <211> 45
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 18
 tctattgcta caaatgccca ggccttccca accattccct tatcc 45

 <210> 19
 <211> 45
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 19
 agataacgat gtttacgggt ccggaagggt tggttaaggga atagg 45

 <210> 20
 <211> 51
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

<400>	20	
gggggatcct	cacgcggcgc	atgtgtgagt tttgtcaca gatttaggct c
		51
<210>	21	
<211>	43	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Synthetic construct	
<400>	21	
gggggatcca	ggaggtgatt	tatgaaaaag acaatcgcat ttc
		43
<210>	22	
<211>	44	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Synthetic construct	
<400>	22	
gggggtgagc	aggagtgat	ttatgaaaaa gacaatcgca tttc
		44
<210>	23	
<211>	52	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Synthetic construct	
<400>	23	
gggggtcagc	tcacgcggcg	catgtgtgag tttgtcaca agatttaggc tc
		52
<210>	24	
<211>	63	
<212>	DNA	
<213>	E. coli	
<400>	24	
atgaaaaaga	cagctatcgc	gattgcagtg gcactggctg gtttcgctac cgttgcgcaa
gct		60
		63
<210>	25	
<211>	30	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Synthetic construct	

<400> 25
gaggttcagc tagtcgagtc aggagcggt 30

<210> 26
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 26
gggagatctt cacgcggcgc atgtgtgagt ttgtcacaa gatttagct c 51

<210> 27
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 27
gacattcaaa tgacccagag cccatccagc 30

<210> 28
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 28
cccagatctc taacactctc cctgttgaa gctctttgtg ac 42

<210> 29
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic construct

<400> 29
ggggtcgaca ggaggtgatt tatgaaaaag acagctatcg c 41

<210> 30
<211> 51

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 30
 ggggtcgact cacgcggcgc atgtgtgagt ttgtcaca gatttaggct c 51

 <210> 31
 <211> 42
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 31
 gggcatatga aaaagacaat cgcatttctt cttgcata tg 42

 <210> 32
 <211> 705
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic construct

 <400> 32
 gaggttcagc tagtcgagtc aggaggcggg ttggtacagc cgggcaggtc cctgagactc 60
 tctgtgcgg cctctggatt cacctttgat gattatgcc tgcactgggt cgggcaagct 120
 ccagggaagg gctcggaaat ggtctcagct atcacttgga atagtggta catagactat 180
 gcgactctg tggagggccg attcaccatc tccagagaca acgccaagaa ctccctgtat 240
 ctgcaaatga acagtctgag agctgaggat acggccgtat attactgtgc gaaagtctcg 300
 taccttagca ccgcgtctc ccttgactat tggggccaag gtaccctggg caccgtctcg 360
 agtgctcca ccaagggcc atcgggtctt ccctggcac cctctccaa gagcacctct 420
 gggggcacag cggccctggg ctgcctggtc aaggactact tccccgaacc ggtgacgggtg 480
 tcgtggaact cagggccctt gaccagcggc gtgcacacct tcccggctgt cctacagtc 540
 tcaggactct actccctcag cagcgtgggt accgtgccct ccagcagctt gggcaccag 600
 acctacatct gcaacgtgaa tcacaagccc agcaacacca aggtggacaa gaaagttgag 660
 cccaaatctt gtgacaaaac tcacacatgc ccaccgtgcc catag 705

 <210> 33
 <211> 645
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 33
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgtagggga cagagtcacc 60
atcacttgtc gggcaagtc gggcatcaga aattacttag cctggtatca gcaaaaacca 120
gggaaagccc ctaagctcct gatctatgct gcattccactt tgcaatcagg ggtcccatct 180
cggttcagtg gcagtggtatc tgggacagat ttcactctca ccatcagcag cctacagcct 240
gaagatgttg caacttatta ctgtcaaagg tataaccgtg caccgtatac ttttggccag 300
gggaccaagg tggaaatcaa acgaaactgtg gctgcacat ctgtcttcat cttcccgcac 360
tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420
cccagagagg ccaaaagtaca gtggaagggtg gataacgccc tccaatcggg taactcccag 480
gagagtgtca cagagcagga cagcaaggac agcacctaca gcctcagcag caccctgacg 540
ctgagcaaag cagactacga gaaacacaaa gtctacgcct gcgaagtcac ccatcagggc 600
ctgagctcgc ccgtcacaaa gagcttcaac aggggagagt gttag 645

<210> 34

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 34
Asp Ile Gln Met Thr Gln Ser
1 5

<210> 35

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic construct

<400> 35
Glu Val Gln Leu Glu Val Asp Ser
1 5